

# **Greening Indiana's Government**

A Plan to Implement Governor Frank O'Bannon's Executive Order 99-07, Greening the Government

May 25, 2000

### **Executive Summary**

The following document provides guidance for implementing the requirements of Executive Order 99-07, Greening the Government. Governor O'Bannon signed the order on April 22, 1999, with the intent of comprehensively improving the environmental performance of State of Indiana operations and, in many cases, making those operations more efficient and cost-effective.

This plan outlines the actions agencies should take to implement the requirements of the executive order. As summarized below, some sections apply to all agencies and other sections apply only to agencies with facilities located outside the Indiana Government Center or to specific facilities. For agencies located entirely within the Indiana Government Center, many of the facilities management issues outlined below are handled by the Indiana Department of Administration (IDOA).

Section I applies to all agencies, and describes employee education programs, the recycling coordinator network, the Governor's Awards program, and the annual agency reporting requirements for Greening the Government (GtG).

Section II describes the recycling requirements for all State facilities. Facilities will recycle office paper, corrugated cardboard, newspaper, glass, plastics (#1 &2), steel, aluminum, motor oil, batteries and fluorescent bulbs. An exemption is available to facilities that cannot find outlets for certain commodities. The GtG Program will assist facilities throughout the State in meeting this requirement.

Section III describes the environmentally preferable purchasing requirements that will be managed by the IDOA Procurement Division. Many of these requirements will result in cost savings for agencies as well as less waste. For example, remanufactured cubicle walls and cubicle furniture can cost up to 50% less than new. Retread tires and remanufactured toner cartridges are cheaper than their new counterparts, and energy efficient office machines save on energy costs.

Section IV, Part A, addresses energy efficiency issues for all state facilities. All agencies are responsible for educating their employees about the importance of turning off computers and lights when not in use.

Section IV, Part B, describes the efforts of IDOA's Public Works Division to "green" State building and deconstruction projects.

Section IV, Part C, explains mercury requirements for all State facilities, and Part D establishes lead assessment goals for facilities with children under the age of 6 years.

Section IV, Part E, describes building equipment operation and maintenance procedures for all State facilities, and sets requirements for the State's vehicle maintenance and body repair shops. Part D also describes requirements for integrated pest management at all facilities.

Section IV, Part E, outlines an Environmental Management System pilot project that will be lead by IDEM. Part D also sets out an alternative fuel and energy efficiency policy affecting all agencies that own vehicles. All State employees are encouraged to carpool to meetings and events that are attended by other State employees.

Part E continues with a section directed to public areas managed by the Departments of Natural Resources and Transportation and the State Fair Commission. And finally, Part D encourages all State facilities to explore green energy purchasing options in their communities.

Section V asks all agencies to be aware of and examine opportunities to reduce single-occupant vehicle commuting by State employees, such as telecommuting, alternative work schedules, carpooling, and the use of public (or mass) transit.

Finally, Section VI defines the ongoing management of the Greening the Government Program. IDOA, the Indiana Department of Environmental Management (IDEM), the Greening the Government Taskforce, and the Governor's office will meet regularly to discuss progress and to establish additional goals for Greening the Government.

This plan comprehensively addresses the environmental impacts of the operations of Indiana's State government. As agencies move forward to implement these policies, they will ensure that State government walks the talk of environmental stewardship, working to protect the environment for future generations of Hoosiers. Please remember that the Greening the Government Program and IDEM are looking forward to providing technical assistance and support to each agency in pursuit of these policies.

#### I. Establish an Employee Education and Reward System

#### A. Education

The Greening the Government Program (GtG) has developed educational tools for the following policies which are available to all State employees. IDOA has established on-line information on GtG through Access Indiana at <www.state.in.us/greening>, as well as through a variety of other informational sources, such as resource manuals, state employee newsletter articles and agency contact networks. In addition, the GtG Program has developed information for training new employees for agencies to incorporate into their new-employee training programs.

#### B. Agency Recycling Coordinators

Established with Executive Order 99-07, the Agency Recycling Coordinator is responsible for educating and encouraging fellow agency members to follow requirements for recycling, waste reduction and energy conservation as established by the GtG Program. The coordinator serves as a liaison between the GtG Program and his/her agency.

#### C. Recognition

A GtG category will be added to the 2001 Governor's Awards for Excellence in Recycling and Pollution Prevention to recognize those individuals, facilities or agencies within State government that implement outstanding GtG programs.

#### D. Annual Reporting

All agencies with ten or more employees shall report annually to the Indiana GtG Program beginning with the fourth quarter of 2000. Applicable agencies are responsible for appointing a GtG contact person who will be responsible for preparing annual reports and who will receive GtG Program information. This annual report will detail each agency's progress towards the policies listed below.

#### II. Establish Recycling Collection at All State Facilities

All agencies will recycle office paper, corrugated cardboard, newspaper, glass, plastics (#1 &2), steel, aluminum, motor oil, batteries and fluorescent bulbs. For State facilities other than the Indiana Government Center, certain commodities may be excluded from this list if the GtG Program determines that recycling those commodities is not feasible. In that case, annual reports must reflect updated research into the recyclability of exempt commodities. The IDOA Procurement Division will establish All State Agency Service Agreements for the collection and recycling of batteries and fluorescent bulbs by October 2000. Additionally, facilities with cafeterias managed by the State or an outside vendor will work to ensure, where feasible, that unused leftovers are provided to community food banks and that all food scraps are composted.

#### III. Purchase Environmentally Preferable Products

The IDOA Procurement Division will continually strive to increase the amount of environmentally preferable products and services available through All State Agency Quantity Purchase Agreements (ASA QPAs). In order to find environmentally preferable products, the State analyzes price, quality and availability in addition to environmental benefits.

- A. Unless otherwise approved by IDOA, agencies shall purchase the environmentally preferable products listed below and all future items designated environmentally preferable by IDOA and provided to agencies through ASA QPAs.
  - Paper Products. All white copy paper purchased by the State will contain at least 30% post-consumer material. When outside vendors are utilized for print jobs, a minimum 30% post-consumer content paper will be required in specifications. Where it is appropriate to use higher post-consumer content paper and it is available, it will be used. Agencies are encouraged to include the recycling symbol and/or the percent recycled content of paper on all printed materials. Also, when feasible the State should buy recycled paper that is either totally chlorine free (TCF) or processed chlorine free (PCF).
  - 2. Other Office Products. IDOA has established restrictions in the statewide office products catalog. These restrictions require agencies to purchase products made with recycled material whenever available and practicable. The current catalog contains approximately eighteen hundred recycled content items. IDOA will continually work to increase the amount of environmentally preferable office products available through the statewide catalog vendor.

- 3. Retread Tires. If they are not damaged or otherwise unusable, all casings for tires of 16.5 inches or larger size that are removed from State-owned vehicles and equipment will be retread and used on non-steering axles (drive axles). Emergency vehicles will be exempt from this requirement.
- 4. Re-refined Oil. State agencies have been required to purchase re-refined oil in a closed loop system (purchased and recycled through the same vendor) as of July 1, 1999.
- 5. Carpet. IDOA will ensure that specifications for all carpet purchased by the State will include post-consumer recycled content as a requirement for bid acceptance. The level of post-consumer material required will be a minimum 25% of total product weight.
- Remanufactured Cubicle Walls and Cubicle Furniture. IDOA will establish an ASA QPA for remanufactured cubicle walls and cubicle furniture. All future purchases of this type will be specified remanufactured.
- 7. Toner Cartridges. In 1999, the State Use Law, IC 16-32-2, was amended to require State agencies to purchase remanufactured toner cartridges through the ASA QPA vendor. Additionally, all toner and ribbon cartridges can be sent to the same vendor for re-manufacturing, thus closing the recycling loop.
- 8. Energy Efficient Products. Current procurement guidelines shall be revised for the purchase of computers, fax machines, printers, multi-use machines and other products, as available, that have the Energy Star efficiency label. All Energy Star features will be enabled when the product is installed. Agencies shall use life-cycle cost analysis in making decisions about their investments in all other products.
- 9. Non-toxic Cleaners and Other Products. The State should be aware of all chemicals used in the carpet cleaning process for State facilities. Chlorinated solvents and other hazardous ingredients should not be used.
- 10. Promotional Items. For those agencies that purchase promotional items to be distributed to the general public during state agency outreach activities, recycled content items should be requested. Agencies should look for items that are least likely to be quickly thrown away.
- 11. Outdoor furniture, decking and signage, biodegradable products, and soy ink will be available to all agencies through ASA QPAs. These items are optional additions to agency environmental purchasing programs.
- B. The Indiana Department of Transportation will continue to increase the use of environmentally preferable products in road construction and all other projects, and will include specific usage of new products in their annual GtG report.
- C. Requirements for doing business with the State of Indiana.

  As of July 1, 2000, IDOA and INDOT will request all bids and proposals submitted to the State to be double-sided and printed on 30% minimum post-consumer recycled content paper or tree-free paper. When possible, soy ink should be used on proposals and reports.

## IV. Enhancing Pollution Prevention, Energy Efficiency and Source Reduction Activities in Government Operations A. Energy Efficiency

- 1. Energy Star Buildings Program. The State of Indiana will become a partner in the United States Environmental Protection Agency's (EPA) Energy Star Buildings program. The Indiana Department of Commerce will coordinate efforts to increase energy efficiency at State facilities and to report progress annually to EPA.
- 2. Financing Mechanisms. Agencies shall maximize their use of available alternative financing mechanisms, including Energy Cost Savings Contracts, utility energy efficiency service contracts, and grant and loan programs which promote energy efficiency to reduce energy use and cost in State facilities and operations. Energy Cost Savings Contracts and utility energy-efficiency service contracts provide significant opportunities for making State facilities more energy efficient at no additional cost to taxpayers.
- 3. Lease Provisions. IDOA shall encourage lessors to apply for the Energy Star Building label.
- 4. Personal Practices. All agencies shall take measures to encourage the following energy efficiency practices where appropriate:
  - a. Turn off lights, computers, copying and other machines and equipment when not needed.
  - b. Adjust window treatments to take advantage of solar heat gain during winter daylight hours, repel solar heat gain during summer daylight hours, and reduce building heating and cooling requirements during evening hours.

#### B. Construction and Deconstruction Guidelines

The Public Works Division of the Department of Administration has incorporated requirements for Architects and Engineers to utilize sustainable design practices and green building products and procedures into its "Designer Manual" and "Standards for Design and Construction". These changes comprehensively address areas of construction and deconstruction, such as eliminating the introduction of hazardous materials, reducing the use of products that produce volatile organic compounds, recycling construction waste and salvaging materials for re-use. All new language for this section can be reviewed on the Public Works web site. http://www.state.in.us/idoa/pwd/

#### C. Mercury

Mercury is a naturally occurring element that conducts electricity very well. It is used in many household, medical and industrial products. Although mercury performs many useful functions in our workplaces and homes, it is toxic and can impair the way we see, hear and function. Mercury evaporates slowly. If spilled or improperly stored, this evaporation will cause continuous contamination of the air you breathe. Mercury devices include: thermostats, fluorescent lamps, blood pressure gauges, barometers, manometers and vacuum gauges, liquid mercury, mercury switches and relays. To ensure mercury is recycled and to eliminate potential spills, State facilities are to do the following:

- 1. Establish a plan to recycle and replace all mercury-containing devices from State facilities.
- 2. All future purchases, where possible, shall be mercury free.
- 3. All mercury thermometers found in State facilities, including, but not limited to hospitals, first aid kits, labs and infirmaries, will be replaced with non-mercury thermometers (digital, alcohol or other). A phase-out plan shall be established to complete the process within 4 years.
- 4. All elemental mercury from State facilities will be identified and immediately recycled.
- 5. Antibacterial products such as those found in health centers, nurses' stations and hospitals that contain mercury shall be identified and replaced with equivalent products that do not contain mercury. A phase-out plan shall be established to complete the process within 4 years.

Visit the following web site for more information on mercury-related issues: www.state.in.us/idem/ctap/mercury

D. Lead. State facilities with children under the age of 6 years, including the Indiana Government Center North (IGCN) childcare facility, will perform lead assessments by April 2001. The schools for the deaf and blind are also encouraged to perform lead assessments.

#### E. Pollution Prevention

- Building Equipment Operation and Maintenance Procedures
  Equipment operates more efficiently and uses less energy when properly maintained. Timely
  maintenance also extends the useful life of equipment, reduces the cost of repairs and prevents
  breakdowns. Agencies shall develop procedures for continuous energy-efficient operation and
  maintenance of equipment including, but not limited to, the following:
  - a. Adjusting thermostats for maximum energy savings while providing occupant comfort.
  - b. Eliminating unnecessary use of lighting and HVAC systems during unoccupied hours.
  - c. Replacing light fixtures and bulbs, when appropriate, with more efficient ones.
  - d. Regularly servicing and adjusting HVAC equipment and controls.
  - e. Reducing water temperatures and installing water-conserving fixtures, where appropriate.
  - f. Improving electric motor efficiency.
- 2. Vehicle Maintenance Facilities
  - a. Discontinue use of chlorinated solvents for parts washing.
  - b. Post signs or otherwise mark drains, sinks and other connections warning employees not to pour wastes such as oil, solvents, antifreeze and other automotive fluids down drains unless permitted to do so.
  - c. If a facility is a conditionally exempt small-quantity generator, ensure that all liquid storage containers are stored in a manner that will not allow them to be in standing water at any time. Make weekly inspections to check for leaks, corrosion and outdated containers and to correct any problems found.
  - d. Recycle all metal parts and oil filters.
  - e. Ensure someone from the facility receives IDEM-approved training on environmental rules and regulations annually. IDEM will host training for state facilities.

- f. Recycle used antifreeze by using a vendor or by purchasing equipment for on-site recycling.
- g. Collect leaking fluids from storage containers and vehicles, including those awaiting repairs, keeping different types of fluid marked and separated for proper management and recycling.
- 3. Collision Repair/Auto Refinishing Facilities
  - a. Use high-volume, low-pressure (HVLP) spray guns even if your facility is not located in a non-attainment area. Inspect your air supply system to ensure that the system is correctly set to work with your HVLP guns.
  - b. Use compliant coatings even if your facility is not located in a non-attainment area.
  - c. Prime or paint vehicles in a sequence that will allow you to continue priming without having to clean the gun between each use.
  - d. Reduce or eliminate use of paint products containing toxic metals, and rotate stock to avoid having to dispose of product that has deteriorated.
  - e. Use hardeners without isocyanates whenever possible.
  - f. Avoid making larger batches than needed for the job.
  - g. Reduce usage of chemical strippers.
  - h. Explore alternatives to disposal, such as giving any unused paint, stripper, etc. to an industry that uses the same material. Note that using the Materials Exchange, found in IDEM's bimonthly newspaper, *Indiana Environment* may simplify this task.
  - i. Use a gun-washing solvent that does not contain hazardous ingredients such as xylene, toluene, chlorinated solvents or methyl ethyl ketone (MEK).
  - j. Seek opportunities to reuse or recycle your scrap plastic whenever possible.
  - k. Use soaps that are biodegradable, low sudsing, and have a moderate pH in their pure form.
- 4. Integrated Pest Management

Integrated Pest Management (IPM) rids buildings of pests without utilizing chemical control. These alternatives should be used unless chemicals are absolutely needed.

- a. All facilities should substitute routine spraying for pests with other techniques, such as gels, traps and baits.
- b. Facilities shall be clean and sanitized to avoid pest problems. Kitchens, refrigerators and stoves shall be kept clean and free of food debris. Keep all stored food in containers made of something other than cardboard. These containers should be off the floor and, when possible, not touching the wall.
- c. All State agencies in leased space shall speak with building management and pest control contractors to request utilization of integrated pest management instead of chemical control.
- d. All agencies with State-owned facilities shall implement integrated pest management in those facilities.
- 5. Environmental Management System (EMS) Pilot Project
  - a. An Environmental Management System pilot project, coordinated by IDEM, shall be developed and implemented, based in large part on ISO-14001;
  - b. The voluntary pilot project will take place at three State facilities with guidance and help by IDEM staff. One of each of the following type of facility will be chosen: A regular office, a motor vehicle facility, and a facility that houses children.
  - c. The design and implementation process should take no longer than 9 months.
  - d. Any compliance problems identified during the design and implementation process shall be handled in a manner similar to the Indiana Department of Labor's Occupational Safety and Health consultation program administered by BuSET. A written memo of understanding would be developed and agreed upon prior to the start of the pilot project. If the compliance problem is deemed a clear and immediate danger, then it requires immediate action, not a memo of understanding.
  - e. The participating facility and IDEM will produce a final report. This report will include recommendations on future EMS activity within state government, costs associated with implementation, cost savings, and options for pollution prevention, source reduction and recycling.

#### 6. Alternative Fuels

- a. Education
  - Procurement officers and other agency officials responsible for vehicle and fuel acquisition will receive written guidance from the IDOA and the Department of

- Commerce about alternative fuel vehicles (AFVs), alternative fuels, and the requirements of both the Energy Policy Act (EPACT) and the Clean Air Act (CAA).
- 2. State employees who drive AFVs should be made aware which vehicles are AFVs, how to refuel their vehicles, and where to obtain fuel. This information will be available in all AFVs.
- 3. The Alternative Fuels Taskforce, through the Department of Commerce, shall work to ensure that mechanics who service state vehicles are aware of any special maintenance required for AFVs and need to obtain specialized training where appropriate.
- b. Vehicle Acquisition. The IDOA Procurement Division will increase the number of AFVs available through All State Agency Quantity Purchase Agreements (ASA QPAs) to 20 percent of vehicle ASA QPAs for model year 2002 vehicles and following years.
- c. Fuel Use. Alternative fuels shall be used in AFVs when fuel is readily available within a reasonable distance from the workstation or travel route.
- d. Alternative Fuels Task Force. All State agencies that operate motor vehicles or refueling facilities shall designate representatives to the Alternative Fuels Taskforce.

#### 7. Energy Efficient Vehicles and Vehicle Operation

- a. The IDOA Procurement Division will develop a policy that sets fuel efficiency standards for all categories of vehicles purchased.
- b. State employees are encouraged to carpool to meetings and events with other State employees travelling to the same meeting or event.
- c. Agencies should maintain a high standard of vehicle maintenance, including scheduled oil changes, engine timing and performance checks, and maintenance of proper tire pressure.
- d. The Department of Commerce's emission control testing program will be made available to agencies for testing State-owned vehicles. The testing program will operate once a year at a site in downtown Indianapolis to accommodate State vehicles. Agencies will be made aware of the program's testing dates throughout Indiana and are encouraged to have their vehicles' emission levels tested.

#### 8. Greening Public Places

- a. State Fair. The State Fair diverts all animal bedding and animal waste from the waste stream to be used as agricultural ground cover. In addition, the State Fair will work with the GtG Program to develop a plan for implementing other "green practices" on a year-round basis including energy savings projects, cardboard recycling and aluminum recycling by January 2001. For the 2000 State Fair a pilot project to recycle clear plastic water bottles will be cosponsored by the State Fair Commission, IDEM and the GtG Program.
- b. Rest Stops. The Indiana Department of Transportation (INDOT) will provide glass, plastic and aluminum recycling at all highway rest stops. INDOT is encouraged to promote GtG by posting signs about the program. Signs will be provided by IDOA.
- c. Department of Natural Resources. All Department of Natural Resources campgrounds will provide receptacles for glass, plastic and aluminum recycling by campground users.
- 9. Purchasing Green Energy. When a State facility has access to green energy, that facility will evaluate whether it is feasible to purchase green energy and will buy green energy when the price is not considerably more than cost of traditional energy sources.

#### V. Establishing Employee Transportation Options

The following transportation options are encouraged as ways to reduce the negative environmental impacts of commuting via single-occupant vehicles.

#### A. Teleworking

The State Personnel Department (SPD) established a telework policy effective March 2000. The policy provides guidelines for the operation of telework programs. Telework benefits the environment by reducing the amount of commuter miles driven by employees, thus causing less use of nonrenewable fuels, less traffic congestion and fewer ozone-causing emissions. Other benefits may include financial savings through increased employee productivity, reduced absenteeism and decreased employee recruiting costs.

#### B. Alternative Work Schedules

The SPD established an Alternative Work Schedule (AWS) Policy effective March 2000. This policy outlines the framework for agencies to implement AWS programs that are tailored to the respective agency's needs and objectives. AWS benefits the environment by reducing the number of days employees

drive to their work location, which reduces automobile emissions. Additionally, by creating workdays that start earlier and end later, AWS often facilitates non-rush hour travel, which reduces drive time and peakhour emissions.

#### C. Carpooling

IDOA and IDEM will promote the carpooling program at the Indiana Government Center in Indianapolis, which includes preferred parking as an incentive. The Taskforce encourages other State facilities to promote carpooling and to provide incentives whenever possible.

D. Parking Cash Out

Parking Cash Out means providing cash or other incentive to employees — instead of a parking pass — on a voluntary basis. SPD and IDOA will evaluate the feasibility of implementing this concept within the next 18 months, specifically for the Indiana Government Center in Indianapolis.

#### VI. Management of the Indiana Greening the Government (GtG) Program

The GtG Program will be managed within IDOA.

- A. The following representatives will meet quarterly to advise the GtG program and to report progress to the Governor's Executive Assistant for the Environment, the commissioners of IDOA and IDEM, the GtG Director and the GtG Coordinator from IDEM.
- B. The GtG Taskforce will continue to meet semi-annually to ensure ongoing agency input in GtG efforts.
- C. The GtG Program will make additional recommendations to the Governor on an annual basis.

Attachment: Definitions

#### Greening the Government

#### Definitions:

<u>Alternative Fuel</u>: A fuel that is substantially non-petroleum and which provides environmental benefits. The following are recognized as alternative fuels: methanol and ethanol in <u>blends of 70% or greater</u>, compressed or liquefied natural gas, liquefied petroleum gas (propane), hydrogen, coal-derived liquid fuels, electricity, and fuels derived from biological materials.

Alternatively Fueled Vehicles: A vehicle that operates using an alternative fuel.

<u>Biobased Product</u>: A commercial or industrial product (other than food or feed) that is produced from biological products or renewable domestic agricultural (plant, animal, and marine) or forestry materials.

<u>Environmental Management Systems</u>: The part of an overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy.

<u>Environmentally Preferable</u>: Products or services that have less undesirable impact on human health and the environment than competing products or services which serve the same purpose. This comparison may consider acquisition of raw materials, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service.

<u>Life Cycle Cost</u>: The amortized annual cost of a product, including capital costs, installation costs, operating costs, maintenance costs and disposal costs spread across the lifetime of the product.

<u>Life Cycle Assessment</u>: The comprehensive examination of a product's environmental and economic aspects and potential impacts throughout its lifetime, including raw material extraction, transportation, manufacturing, use and disposal.

<u>Pollution Prevention</u>: Practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water or other resources; or protection of natural resources by conservation.

<u>Post-consumer Material</u>: A material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. "Post-consumer material" is part of the broader category of "recovered material."

<u>Recycling</u>: The series of activities, including collection, separation and processing, by which products or other materials are recovered from the solid waste stream for use as raw materials in the manufacture of new products other than fuel for producing heat or power by combustion.

<u>Waste Reduction</u>: Preventing or decreasing the amount of waste being generated. Techniques include waste prevention, recycling and purchasing recycled and environmentally preferable products.